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THE OCCURRENCE OF THE BOLL WEEVIL IN 1918

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The year 1918 is exceptional in the history of the boll weevil in that it is the second year since the establishment of the weevil in the United States that we have been able to record a net loss in territory. The only other year was 1896, the fifth year of weevil invasion. This follows a year of very slight increase but does not mean that the movement of the boll weevil has been permanently stopped. The great loss in territory is but a fraction of the territory which was lost at the beginning of 1918 due to the extreme cold weather of the winter of 1917-18. A very large belt around the entire periphery of the territory was almost without weevils in the early part of the season and the movement of the weevils into new territory was slow and irregular. Much of the territory in the northern and western portions was not regained, partly because of the early fall frosts and partly because of the drought in the northern portion of the belt and the drought and sparsity of cotton in Oklahoma and western Texas. There is reason to believe that even quite a strip of territory recorded as infested will not be held by the weevil during the winter on account of the lateness of the arrival of the weevils. A warm winter season is the only condition which would favor a successful survival of the weevil in a 25-mile belt along the northern and western portions.

As will be noted in the table below, the losses in territory were experienced in Texas, Oklahoma, Tennessee, and Alabama, while the gains in territory were made in Florida, South Carolina, Georgia, and New Mexico. This is the first record of the boll weevil on cotton in New Mexico, where it is found in a small area in the Pecos Valley. The weevil has reached the southernmost limits of cotton production in Florida, having closely followed the extension of cotton cultivation, and is steadily progressing in South Carolina. The latest reports from Georgia indicate that the boll weevil is surviving in great numbers due to the warm weather.

Almost the entire sea-island cotton belt is now infested.

In Texas the line passes from western Val Verde County to Mertzon in Irion County, San Angelo in Tom Green County, Coleman in Coleman County, thence northward through Baird and Pueblo in Callahan County, Jermyn in Jack County, and Henrietta in Clay County.

In Oklahoma the line enters the State at Ryan in Jefferson County and passes through Wynne Wood in Garvin County, Shawnee in Pottawatomie County, Holdenville in Hughes County, Kiowa in Pittsburg County, and Heavener in Le Flore County.

In Arkansas the line passes through Clarksville in Johnson County, Shirley in Van Buren County, Heber Springs in Cleburne County, Batesville in Independence County, Newport in Jackson County, and Gavin in Crittenden County, opposite Memphis.

In Tennessee the line passes through Memphis in Shelby County, Williston in Fayette County, Bolivar in Hardeman County, Selmer in McNairy County, Lawrenceburg in Lawrence County, and south of Pulaski in Giles County.

In Alabama the line passes through Scottsboro in Jackson County.

In Georgia the line passes through Berryton in Chattooga County, Rome in Floyd County, Rogers in Bartow County, Oakhurst in Cobb County, the northern portion of Rockdale County, Newborn in Newton County, north of Madison in Morgan County, south of Thurston in Greene County, north of Barnett (Warren County) in Taliaferro County, north of Boneville in McDuffie County, and south of Tahoma in Richmond County.

In South Carolina the line runs through Ellenton in Aiken County, Branchville in Orangeburg County, Saint George in Dorchester County, and Charleston in Charleston County.

In Florida the line runs through Ozone in Pinellas County, Tampa, Seffner, and Plant City in Hillsborough County, Fort Meade in Polk County, Kissimmee in Osceola County, and Indian River City in Brevard County.

In New Mexico the weevil occurs in Carlsbad in Eddy County.

The weevil also occurs in the mountains of Arizona in Cochise, Santa Cruz, and Pima Counties, on a wild cotton food plant (*Thurberia thespesioides*) but does not attack cotton in Arizona. It has not been found in California.

Altogether the weevil invaded only 16,100 square miles of new territory during 1918 and lost 46,600 square miles of formerly infested territory, making a net loss of 30,500 square miles. About 150,000 square miles of cotton territory still remains uninfested.

The following table shows the gains and losses in territory during 1918, by States:

Total area in square miles infested by the boll weevil in 1918.

State.	Year first infested.	Area infested in 1917.	Gain in 1918.	Loss in 1918.	Area infested in 1918.
		<i>Sq. miles.</i>	<i>Sq. miles.</i>	<i>Sq. miles.</i>	<i>Sq. miles.</i>
Texas.....	1892	182,600		18,100	174,500
Louisiana.....	1903	40,800			40,800
Oklahoma.....	1906	39,000		22,200	16,800
Arkansas.....	1906	39,000			39,000
Mississippi.....	1907	46,340			46,340
Alabama.....	1910	50,600		700	49,900
Florida.....	1911	26,000	9,000		35,000
Tennessee.....	1914	9,100		5,600	3,500
Georgia.....	1915	44,500	1,800		46,300
South Carolina.....	1917	300	5,200		5,500
New Mexico.....	1918		100		100
Total.....		488,200	16,100	46,600	457,740

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